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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 08/918,194      | 08/21/1997  | DAVID M, NATHASINGH  | 30-4358(4710        | 5728             |

7590

08/05/2002

ERNEST D BUFF  
ALLIED SIGNAL INC  
PO BOX 2245  
101 COLUMBIA ROAD  
MORRISTOWN, NJ 07962

EXAMINER

NGUYEN, TUYEN T

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 08/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

08/918,194

Applicant(s)

Nathasingh et al.

Examiner

Tuyen T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on May 30, 2002
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 7, 14-18, 20-25, and 28-39 is/are pending in the application.
- 4a) Of the above, claim(s) 37-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 7, 14-18, 20-25, and 28-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4, 14-18, 21-24, 28-32 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 61-15312 A in view of Klappert et al. [US 5,063,654].

JP 61-15312 A discloses a segmented core structure comprising a plurality of segments [see figure 4], each of which comprises a plurality of packets [1], each of said packets comprising a predetermined number of groups [6A, 6B] of cut amorphous annealed metal.

JP 61-15312 A discloses the instant claimed invention except for the step-lap joint patterns at the ends of the packets.

Klappert et al. discloses a packet [see figure 6] for a segmented core structure formed of groups of cut amorphous steel strips arranged in a step-lap joint pattern.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the packet design of Klappert et al. for the packets of JP 61-15312 A for the purpose of facilitating joining and strengthening.

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Regarding claims 4, 14-18 and 29-32, JP 61-15312 A, as modified, discloses the instant claimed invention except for the specific segment design.

The specific segment design of JP 61-15312 A, as modified, would have been an obvious design consideration based on the specific applications intended.

Regarding claims 21-24 and 34-36, JP 61-15312 A, as modified, discloses the instant claimed invention except for the core being housed in an oil filled or dry-type transformer, a distribution transformer, a power transformer or voltage conversion apparatus.

It would have been an obvious matter of design choice, absent evidence of criticality shown in the present invention and the lack of implicit or explicit limit to a specific design in the prior art, to the core of Sclater, as modified in an oil filled or dry-type transformer, a distribution transformer, a power transformer or voltage conversion apparatus, since applicant has not disclosed that housing the core in an oil filled or dry-type transformer, a distribution transformer, a power transformer or voltage conversion apparatus solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the core structure of JP 61-15312 A, as modified.

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 61-15312 A in view of Klappert et al. as applied to claim 1 above, and further in view of Olsen [US 3,538,474].

JP 61-15312 A in view of Klappert et al. discloses the instant claimed invention except for the segment being coated with a bonding material.

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Olsen discloses a segmented core structure having a plurality of segments each of which being coated with a smooth bonding material.

It would have been obvious to one having ordinary skill in the art at the time invention was made to coat the segments of JP 61-15312 A, as modified, with a bonding material, as suggested by Olsen, for the purpose of facilitating joining.

4. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 61-15312 A, as modified, as applied to claim 1 above, and further in view of Granfield [US 2,465,798].

JP 61-15312 A, as modified, discloses the instant claimed invention except for at least one core segment having a cruciform cross-section.

Granfield discloses utilizing strips having varying widths arranged to provide a cruciform shape cross-section.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to the strip design of Granfield in JP 61-15312 A, as modified, for the purpose of maximizing the coil space fill factor.

5. Claims 25 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 61-15312 A, as modified, as applied to claims 1 and 28 above, and further in view of Ames et al. [US 4,450,206].

JP 61-15312 A, as modified, discloses the instant claimed invention except for the strips having a composition defined by the formula  $M_{70-80}Y_{5-20}Z_{0-20}$ .

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Ames et al. discloses utilizing a metal strip composition defined by the formula MYZ where the atom percentage is in the range of the claimed invention [see table I].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the amorphous steel strips composition of Ames et al. in JP 61-15312 A, as modified, for the purpose of improving resistance to embrittlement.

#### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1, 4, 7, 14-18, 20-25 and 28-36 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

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calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

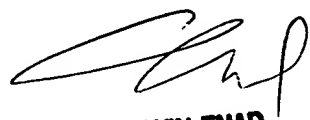
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tuyen T. Nguyen whose telephone number is (703) 308-0821.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Elvin Enad, can be reached at (703) 308-7619. The fax number for this Group is (703)872-9318 before the final office action, if the response is after final office action the fax number is (703)872-9319.

Any inquiry of a general nature or relating to status of this application of proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

TTN *tin*

August 1, 2002

  
**ELVIN ENAD**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**  
*8/2/02*